

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of:)	
)	CC Docket No. 02-6
Schools and Libraries Universal Service)	
Support Mechanism)	WC Docket No. 13-184

INITIAL COMMENTS BY
Butte County Office of Education (BCOE)
RELATED TO THE E-RATE 2.0 NOTICE OF PROPOSED RULEMAKING

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Introduction and Summary

Butte County Office of Education located in the Central Valley of California provides educational and administrative services to 15 Butte County school districts, the 32,000 students living in Butte County, and another 17,000 students through our Migrant Education and California Mini-Corps programs located throughout the state.

We appreciate the opportunity to comment on the Notice of Proposed Rulemaking (NPRM). The Butte County Office of Education hereafter referred to as (BCOE) commends the Commission on the comprehensive nature of this notice. BCOE will address and offer comments on the 3 program goals listed in paragraph 12 of the Notice of Proposed Rule Making (NPRM).

Overview of Response

In this document BCOE will offer comments on the 3 program goals listed in paragraph 12 of the Notice of Proposed Rule Making (NPRM). These are:

- (1) Ensuring schools and libraries have affordable access to 21st Century broadband that supports digital learning;
- (2) Maximizing the cost-effectiveness of E-rate funding; and
- (3) Streamlining the administration of the E-rate program.

As the FCC moves forward with this NPRM, it is important to remain focused on the fact that E-rate is a successful program and that any changes to the E-rate program should be focused on expanding a program that has yet to reach its full potential. E-rate funding levels have not kept pace with the district bandwidth needs. With the national mandate of Common Core online testing, and other Educational trends such as: 1) Digital instructional materials 2) Bring your own Device initiatives; it is imperative that E-rate keep up with our nation keep up with these educational needs. It will be the bare minimum for our educational system in order to compete in a global economy.

The current program, while needing some updates to its structure, is mostly in need of change in the area of an adequate funding level. Adequate funding is essential to improving the E-rate program, and ensuring reliable technology infrastructure at our schools.

Goal 1: Ensuring schools and libraries have affordable access to 21st Century broadband that supports digital learning (17-29, 36-40, 65-89)

E-rate needs to shift from merely establishing connectivity to expanding high-capacity broadband connectivity. Basic Internet connectivity is no longer sufficient to meet our 21st Century educational needs. Schools and libraries need access to higher-speed connectivity that allows students and teachers to take advantage of the rapidly expanding opportunities for interactive digital learning. Mobile devices (e.g., smart phones, handhelds, mobile PCS, etc.) enable students to download their textbooks to be accessed both during school hours as well as beyond the school day. Students should be able to learn anytime anywhere. We encourage E-rate funding for wireless Internet access services for mobile learning devices that are used beyond school premises as well as provide funding for related professional development.

All schools should have internal wireless networks capable of supporting one-to-one device initiatives, and libraries should have comparable wireless connectivity. The growing demand for priority one funding is driven primarily by the need for higher bandwidth connections in schools and libraries, especially as schools across the country move towards online assessments. Access to high speed broadband is the key for modern teaching and learning to occur in all schools across the country

(17, 20, 21) Total funding requests for the past 2 years have approached the \$5 billion level and we believe that this amount reflects an appropriate level of expenditures to meet the needs of school districts. The average demand level of the program has been moving towards the \$4-\$5 billion for the past two years. The funding cap should be increased to \$5 billion in order to meet the proposed goals of the FCC and the Administration's goals outlined in the ConnectED initiative.

The dramatic increase in use of devices on campus, and the anticipated continued growth of the same will increase bandwidth usage. The future demand is not currently known and as new technologies emerge, the quality, reliability, and speed of these connection needs to meet the demand placed upon them by students and teachers. Providing the bandwidth that our students need to utilize their 1-to-1 devices is a special challenge for our counties rural and remote regions. School and Library sites need adequate bandwidth and their demand grows. The current and systems of the future will be student needs driven, and be interactive. These again, will take bandwidth that is even greater than today's needs.

(40) BCOE disagrees that measuring the success of E-rate funding can be directly reflected in classroom outcomes and academic performance measures. There are many factors that will be influencing the outcomes, the relationship between broadband availability and academic outcomes would be tedious to document and only marginally reliable. Broadband has become an essential tool for today's education, broadband connectivity allows for information access, videoconference content delivery, collaboration in real time, and global involvement/virtual field trips to other countries. However broadband connectivity on its own cannot determine classroom success and E-rate program success should not be tied to academic performance measures. Connectivity is one of many tools that are available to districts to support and improve instruction.

A more appropriate measure would be the connectivity rate of our nation's schools. Specifically, E-rate is an infrastructure and connectivity program. So it should be measured in those terms. In Butte County, we have schools that are still under-served with bandwidth (Golden Feather School District, Feather Falls School District, and Pioneer School District). A measure of success of E-rate would be when these schools have the base level of bandwidth per student determined by E-rate 2.0.

Goal 2: Maximizing the cost-effectiveness of E-rate funding (43-90, 125-223)

(62, 64- 69, 70, 71, 90) Over its history, this program has funded a significant amount of infrastructure deployment. We need to shift from merely establishing connectivity to expanding connectivity. Mobile devices (e.g., smart phones, handhelds, mobile PCS, etc.) enable students to download their textbooks to be accessed both during school hours as well as beyond the school day. Students should be able to learn anytime anywhere. We support E-rate funding for wireless Internet access services and for mobile learning devices that are used beyond school premises as well as provide funding for related professional development. The original intent of E-rate was to provide Internet access and the infrastructure to facilitate that access. In order to maintain the same success, other components that are indirectly related to that access (i.e. web services, voice services) need to be reviewed, and at minimum placed into the Priority 2 category. This will help ensure the more critical Priority 1 services have the appropriate funding level.

Instruction and assessment will utilize media rich resources (video, interactive e-books, collaboration sites and media repositories) all available online and in some cases, hosted off school premise. These services will be delivered online and will require additional investments in hardware and high capacity connections in order to meet the demands of this digital age educational tools. The industry defines these

as “Cloud Services”. It is critical that we have the adequate bandwidth for cloud services moving forward.

In order to ensure that there is appropriate funding for these broadband services (Priority 1), we support a plan to move non-broadband type of voice services and other VOIP, long distances, etc. services that are supplemental but not fundamental to broadband service, to a Priority 2 level. The migration of existing Voice Services to a Priority 2 status should meet both program (funding) needs, and applicant needs. We feel that while these services are important and relevant in today’s schools and libraries, with advance notice and appropriate planning, they could be transitioned to a secondary priority with relatively little harm.

There are some eligible services that go beyond basic and broadband conduit access to the Internet, and are free to schools. The best example is e-mail services. These compete for limited dollars and should be removed from being eligible since program dollars are limited. This removal does not necessarily mean that schools will not have no-cost or low-cost alternatives for email, etc. There are numerous schools throughout the nation that take advantage of Google and other companies free for education email, file storage services, etc.

It is our recommendation that USAC restructure funding priorities to retool the classrooms. The most important element of E-rate is to ensure access to adequate network capacity for schools and libraries that meet the 21st Century demand for education. So in the prioritization of funding, and determining eligibility, the need for access to these on-line resources to the end user (student/teacher) must be met to the best of the ability of the program. This means that the wide area network (data lines), and Internet access are essential.

The cabling and electronics to achieve wireless campus connectivity are equally important when rule changes permitted telecommunications providers to provision "dark" fiber to schools and districts as an eligible service. There was not a significant uptake in the provision of the new service for education because those same telecommunications providers are positioned to make significantly more money by providing turn-key services to include equipment and service (lit services). Or the traditional leased telecommunications services.

While every applicant’s situation will be different, the FCC should continue to support lit and dark fiber options. We support placing dark fiber into the Priority 1 category with lit fiber; this includes modulating electronics, routers, and special construction charges. Basic Maintenance of Internal Connections (BMIC) and other services should be accessible to all schools and libraries. There is a growing need for infrastructure to support the increased broadband capacity necessary for 21st Century instruction and assessment.

We strongly support allowing schools and libraries to own their WAN circuits when this is shown to be cost effective. The current prohibition on WAN ownership means schools and libraries may be paying far more annually to lease circuits vs. owning the circuits outright or sharing ownership with other anchor institutions as part of a regional network.

For rural locations like we have in Butte County and in the 9 northern counties we need alternative connectivity options, such as wireless solutions, those should continue to be eligible. Fiber types of technologies are the most desired approach (due to the bandwidth it can provide). However for rural locations and where there are great distances between schools, carrier class wireless systems maybe the most cost effective approach at this time. We support an E-rate program moving forward that has a variety of broadband options that are eligible to meet each unique school/library situation across our nation.

(135) We do not support the per-pupil approach to distribution of E-rate funding we do not believe that a per-pupil allocation takes into consideration the differences in our communities and schools. The current approach used to distribute E-rate funding is working well. It has worked well in the past and acknowledges the differences in economy and location. We recommend that adjustments to the current system be made to improve upon it rather than a transition to an entirely different method of allocation.

Goal 3. Streamlining the administration of the E-rate program (45-51)

Much attention has been focused on the volume of school districts that hire consultants to handle the district's E-rate application, and on the amount of money earned by these firms. The expansion of services offered by E-rate consultants is directly related to the complexity of the program, and the severe consequences that flow from even minor clerical errors as the program exists today.

Further streamlining and simplification of the application, review, commitment and disbursement processes, in order to make the most of E-rate funding and accelerate the delivery of support for high-capacity broadband at speeds that will support digital learning, while maintaining appropriate safeguards against waste and abuse.

(45, 46, 47, 49) The current USAC web interface and utilities are outdated. The entire system needs to be streamlined per SECA's proposal to meet current technology and applicant/service provider requirements. Streamlining the application process is a necessity.

The current program has fallen short in its efforts to reduce paperwork. In too many cases, services are denied as the result of errors by either the applicant or by inconsistent processing by PIA (Program Integrity Assurance) at USAC. In the case of a denial of funding due to an error by the USAC, the only recourse for the applicant district is to appeal the decision to the FCC. This step can take months and into multiple years.

The E-rate program has played a critical role in connecting our schools and libraries to on-line resources that were not available just a few years ago. Digital learning throughout the school curriculum is needed to prepare students for the next step in their education. Our students need to graduate from high school with the skills and knowledge they need to succeed in today's global economy. Access to high speed broadband is the key for modern teaching and learning environment. The single most effective step the FCC can take to bolster the success of the E-rate program is to provide funding in an amount that is sufficient to keep up with current demand and 21st Century classroom needs.

Respectfully submitted

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